

Notice of Allowability

Application No.

10/542,503

Applicant(s)

TOYOZAWA ET AL.

Examiner

MANSOUR M. SAID

Art Unit

2629

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 2/7/08.
2. ☒ The allowed claim(s) is/are 2-7 and renumbered as 1-6.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date 7/15/05 & 12/26/07, 1/22/08
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material

5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

DETAILED ACTION

Allowable Subject Matter

1. Claims 2-7 are allowed.

The following is an examiner's statement of reasons for allowance: Claims 2-7 are allowed since certain key features of the claimed invention are not taught or fairly suggested by prior art. **In claim 2, "said circuit section can switch between an operation mode and a waiting mode in response to the switching between the normal power consumption state and the low power consumption state of a main body of the electronic device, said circuit section comprises standby control means that operates by receiving power supply voltage from the main body of the electronic device and drives the display area to show a desired image in the operation mode, and while receiving the power supply voltage from the main body of the electronic device, stops driving the display area and inactivates the circuit section to suppress power consumption of the panel in the waiting mode, and said standby control means executes a control sequence to shut off direct current components flowing through resistive elements at least included in the circuit section during the inactivation, and wherein said display area comprises pixel electrodes arranged as a matrix, common electrodes opposing to the pixel electrodes, and an electro-optic material held between the pixel and common electrodes, said circuit section comprises drivers for writing signal voltage to the pixel electrodes, a common driver for applying a common voltage to the common electrodes, and an offset circuit for adjusting a level of the common voltage relative to the signal voltage, and said standby control means executes a control sequence**

to shut off direct current components flowing through resistive elements included in the offset circuit during the inactivation". In claim 4, "said circuit section can switch between an operation mode and a waiting mode in response to the switching between the normal power consumption state and the low power consumption state of a main body of the electronic device, said circuit section comprises standby control means that operates by receiving power supply voltage from the main body of the electronic device and drives the display area to show a desired image in the operation mode, and while receiving the power supply voltage from the main body of the electronic device, stops driving the display area and inactivates the circuit section to suppress power consumption of the panel in the waiting mode, and said standby control means executes a control sequence to shut off direct current components flowing through resistive elements at least included in the circuit section during the inactivation, and wherein said display area comprises pixels arranged as a matrix, said circuit section comprises drivers for writing analog voltages having gradations in accordance with image information sent from the main body of the electronic device to the pixels, and an analog voltage generator for supplying at a plurality of levels of the analog voltages already corresponding to the gradations to the driver, and said standby control means executes a control sequence to shut off direct current components flowing through series resistive elements for voltage splitting included in the analog voltage generator during the inactivation". In claim 5, "said circuit section can switch between an operation mode and a waiting mode in response to the switching between the normal power consumption state and the low power consumption state of a main body of the electronic device, said circuit section comprises standby control means that operates by receiving power supply voltage from the main body of the electronic device and drives the display area to show a desired image in the operation

mode, and while receiving the power supply voltage from the main body of the electronic device, stops driving the display area and inactivates the circuit section to suppress power consumption of the panel in the waiting mode, and said standby control means executes a control sequence to shut off direct current components flowing through resistive elements at least included in the circuit section during the inactivation, and wherein said standby control means executes a control sequence to block clocks supplied to at least the circuit section to suppress charge and discharge occurring in the circuit section during the inactivation". The closest prior art **Tsutsui Yusuke et al.** (JP 2001-282164) teach a driving device for display device comprising a power source circuit of a the a liquid crystal display device outputs a boosted power source voltage at normal operation and generates a non-boosted power source voltage lower than that at the time of the normal operation by controlling a switch for changing over the output in the circuit at the time of a power saving mode and supplies the output voltage to analog circuit of a driving circuit to attain the reducing of power consumption in the analog system circuits, however, singularly or in combination with other prior art, fail to anticipate or render the above underlined limitations obvious.

2. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mansour M. Said whose telephone number is 571-272-7679. The examiner can normally be reached on Monday through Thursday from 8:30-6:00 P.M. The examiner can also be reached on alternate Friday from 8:30 a.m. to 5:00 p.m. EST. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard A. Hjerpe whose telephone number is 571-272-7681.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

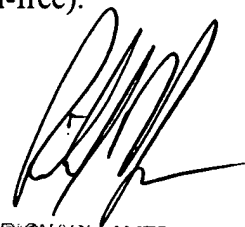
or faxed to: 571-273-8300 (for Technology Center 2600 only)

Hand-delivered responses should be brought to the Customer Service Window at the Randolph Building, 401, Dulany Street, Alexandria, VA 22314.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Mansour M. Said

2/18/08


RICHARD HJERPE
SUPERVISOR, EXAMINER
2008

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